Veraviewepocs Panoramic X-Ray Unit (Project 02-25) (4/04)

The Veraviewepocs is a direct-current panoramic X-ray unit marketed by J. Morita USA. It is said to produce contrast-rich images in only 8.2 seconds while producing half the radiation as compared to other units. The Veraviewepocs is advertised as having a unique, computerized auto-focusing system that uses a light sensor to assess the proper distance to produce the proper image layers. Additionally, it features a three-parameter auto-exposure system that detects emitted radiation and automatically adjusts the X-ray tube voltage and current while correlating the speed of the film movement. Furthermore, the Veraviewepocs is advertised as possessing an imaging arm that automatically adjusts in two dimensions to maintain the proper focal trough during exposure. The combination of these features is advertised to produce a consistent, distortion-free image layer with a uniform magnification value of 1.3X. A touch-pad membrane with LED indicators and audible signals controls all operations. In addition to the standard panoramic mode, the Veraviewepocs offers other exposure modes to include an enlarged panoramic mode (1.7X), pediatric panoramic, sinus panorama, and lateral TMJ series. Cephalometric capability is an option while a digital configuration will be available summer 2004. The unit contains a power-assisted lift mechanism to enable easy positioning and provide access for patients in wheel chairs. The Veraviewepocs configuration options include the standard free-standing base or the optional wall-mount version. The unit weighs 419 pounds and requires a space 92.7" H x 41" W x 48" D, and is available in both 120V, 60Hz and 230V, 50/60Hz electrical configurations.

Manufacturer:

J. Morita USA 9 Mason Irvine, CA 92618 (800) 831-3222 (949) 581-9600 (949) 581-3916 FAX www.jmoritausa.com

Suggested Retail Price:

\$26,000 Film-Based Panoramic \$33,000 Film-Based Panoramic + Cephalometric \$45,000 Digital Panoramic \$63,000 Digital Panoramic + Cephalometric

Government Price:

\$15,600 Film-Based Panoramic \$19,800 Film-Based Panoramic + Cephalometric \$27,000 Digital Panoramic \$37,800 Digital Panoramic + Cephalometric

ADVANTAGES:

- + Produces quality panoramic radiographs with a short (8.2 second) exposure cycle
- + Multiple panoramic modes (i.e., standard, enhanced, pediatric, and sinus)
- + Capable of lateral TMJ series
- + Automatic exposure system
- + Allows manual positioning and exposure parameters
- + Easy and intuitive to use
- + Upgradeable from film-based to digital (summer 2004)
- + Cephalometric capability is available as an option
- + Met all radiation and electrical safety requirements
- + Initial manufacturer training helpful
- + Film-based configurations slightly less expensive than other manufacturers
- + Future digital configurations potentially much less expensive than other manufacturers

DISADVANTAGES:

- No linear tomography capability
- Pre-exposure adjustments may be time consuming
- Possible mouthpiece learning curve for technicians accustomed to bite-stick positioning devices

SUMMARY AND CONCLUSIONS:

The Veraviewepocs is a direct-current panoramic x-ray unit that can produce exposures in half the time (approximately 8 seconds) compared to other panoramic units. The Veraviewepocs will be available in a digital configuration in the summer of 2004. The unit is capable of standard panoramic, enhanced detail panoramic, pediatric panoramic, maxillary sinus, and TMJ imaging. The Veraviewepocs is capable of optional cephalometric imaging but cannot be configured for linear tomography. The clinical evaluators were satisfied with the unit's function, finding it easy and intuitive to use. The unit produced excellent images and met the demands of the USAF Dental Inprocessing Center, providing reliable function over the course of the evaluation. The film-based configuration of the unit is slightly less expensive than comparable units while the future digital versions will potentially provide even more cost savings. The **Veraviewepocs** is rated **Acceptable** for use by the federal dental services.